

I am sure that medical practitioners in Britain, along with their colleagues in New Zealand, are keen to see any fraudulent claiming appropriately dealt with as fraudulent actions by a few in any profession reflect poorly on the rest of the profession.

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Catholic beliefs about contraception

EDITOR,—Gerard J Murphy presents Catholic belief about contraception.¹ However, the argument against contraception—that sex should be for pleasure and procreation, not for pleasure alone—applies equally against sex during the “safe period” and sex with a pregnant or lactating partner.

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1 Murphy GJ. Catholic beliefs about contraception. *BMJ* 1994; 309:1231. (5 November.)

Misoprostol and birth defects

EDITOR,—Two mistakes occurred in Jan Rocha's news article on Brazilian doctors' investigation of a possible link between misoprostol and birth defects.¹ Firstly, misoprostol is sold as 200 µg pills, not 200 mg pills as stated. Secondly, it is not an efficient abortifacient.

To our knowledge, two studies on the abortifacient potency of oral misoprostol have been reported in the English literature. In the first study 300 women (at 9-12 weeks' gestation) were given two doses of misoprostol (2×400 µg or 2×200 µg) or placebo in the evening before a planned legal surgical termination.² Partial or complete abortion occurred in only 11% of the women who received the higher dose and 9% of those who received the lower dose. Similarly, of 40 women given 400 µg misoprostol seven days before surgical termination in the other study, only two had a complete abortion; among the 38 others the pregnancy continued in 32 while six had an incomplete or missed abortion as assessed by ultrasound scanning just before termination.³

In most women misoprostol induces an increase in uterine pressure,³ and this is probably the reason why 35-50% of women given misoprostol experience some degree of vaginal blood loss.^{2,3} Conceivably, the rise in intrauterine pressure or the uterine bleeding, or both, could lead to teratogenic effects. Increased rates of fetal malformations have been observed in rats given another prostaglandin analogue, sulprostone, in intravenous doses of ≥50 µg/kg/day (unpublished results of Schering AG quoted by World Health Organisation⁴).

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1 Rocha J. Brazil investigates drug's possible link with birth defects *BMJ* 1994;309:757-8. (24 September.)

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Training in laparoscopic surgery

EDITOR,—We agree with Imran Mushtaq and C Harris's call for structured training in laparoscopic surgery.¹ Regrettably, they seem to be unaware of the pioneering activity of their own royal college in respect of laparoscopic training. The Royal College of Physicians and Surgeons of Glasgow was the first college to offer courses in basic laparoscopic skills and laparoscopic cholecystectomy, the first of which took place in April 1993. Since then a further six courses have been held—some were advertised in the *BMJ*—and 60 surgeons in training and two consultants from outside Britain have attended. The surgeons in training have been predominantly from the west of Scotland, but an associate professor of surgery from the United States attended.

In December 1993 the college opened a clinical skills laboratory, which is specially equipped for laparoscopic training and to allow “dry” training of other manipulative procedures. The college is also involved in the Scottish Training Board for Minimal Access Therapy and with the Edinburgh colleges and Professor A Cuschieri in Dundee in establishing a minimal access training unit for Scotland. We endorse the suggestion that surgical trainees should be encouraged to attend such courses early in their careers, but at present nothing more than encouragement can be offered.

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Vascular surgical services

EDITOR,—J A Michaels and colleagues put forward good reasons for a move towards the organisation of regional vascular surgical services.¹ Although the Oxford Regional Vascular Audit Group may have suggested that a more active vascular service practice results in a lower rate of amputations with huge potential savings in morbidity and costs,¹ other studies, notably that of Evans *et al*, have shown the potentially adverse effect on the level of amputation of failed distal vascular reconstruction and its associated poorer rehabilitation outcome.² There is no clear scientific evidence that active vascular surgical services save more knee joints or reduce morbidity and mortality.

In an audit of amputation levels in patients referred for prosthetic rehabilitation Fyfe found that 39 different surgeons performed 263 amputations. Twenty four of them performed fewer than five amputations and a further five surgeons fewer than 10. Reducing the number of individual surgeons carrying out amputations by concentrating these procedures within specialist vascular centres must improve the overall quality of amputation surgery, quality being essential for a satis-

factory outcome of prosthetic rehabilitation. Close cooperation between the surgical team and the rehabilitation team is essential, and the move towards regional vascular surgical services will certainly help integration of the surgical service with the amputee rehabilitation team, thus improving the quality of service. The move is therefore fully supported by the International Society for Prosthetics and Orthotics (United Kingdom) National Member Society, a multidisciplinary society with a major interest in rehabilitation after amputation.

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Hepatitis C virus antibodies and Graves' disease

EDITOR,—J C Duclos-Vallée and colleagues have reported a high prevalence of antibodies to hepatitis C virus in patients affected by Hashimoto's thyroiditis,¹ and Tran *et al* have described two cases of the same association.² In response to these reports we studied the prevalence of hepatitis C virus antibodies and viraemia in the serum of 39 patients (3 male) with a mean age of 46 years who had various autoimmune thyroid diseases: 18 (3 male) had Graves' disease, 16 had asymptomatic thyroiditis, and five had Hashimoto's thyroiditis.

Samples from 14 subjects gave positive results for hepatitis C virus antibodies on enzyme linked immunosorbent assay (ELISA), and four of these were also positive on a confirmatory test of second generation ELISA. Hepatitis C virus was detected in the serum of three of these four subjects, all of whom had Graves' disease. Hepatitis C virus antibodies and hepatitis C virus RNA were not found in the patients with Hashimoto's thyroiditis or with asymptomatic thyroiditis. Simple linear regression analysis failed to show any correlation between concentrations of thyroid hormones and hepatitis C virus antibodies. None of the samples that were positive for hepatitis C virus contained autoantibodies (antinuclear, antimitochondrial, anticardiolipin, and anti-liver-kidney-microsome), excluding an autoimmune hepatitis or any other associated autoimmune disease. We found hepatitis C virus RNA in a fifth of patients with Graves' disease but not in patients with Hashimoto's thyroiditis, possibly because of the small number of samples tested (O Len *et al*, 4th world congress international gastrosurgical club, Madrid, 1993). These results are particularly interesting given the epidemiological reports of the national statistics information service that show the rarity of hepatitis C in the Italian population.

Several studies have suggested that alteration of the immunoregulatory system by factors such as stress or viruses may lead to Graves' disease by the breakdown of tolerance for autoantibodies to thyroid stimulating hormone receptor.³ Recently, we have also found the presence of antibodies to 70 kDa heat shock protein in the serum of patients with autoimmune thyroid disease, and this result supports the link between those immunogenic molecules and thyroid autoimmune processes.⁴ To clarify the nature of this association we need